## What is claimed is:

1. A method of controlling the formation of crystalline hydrates in a fluid system, said method comprising contacting the fluid with a polymer capable of interacting with charged molecules in the fluid, and allowing the polymer to sorb the charged gaseous molecules.

- 2. The method as claimed in claim 1 wherein the fluid is selected from the group consisting essentially of
  - (i) oil and water,
  - (ii) gas and water,
  - (iii) a combination of oil and gas and water.
- 3. The method as claimed in claim 1 wherein the polymer is a hyperbranched polyamino polymer.
- 4. The method as claimed in claim 1 wherein the polymer is a dendritic polymer.
- 5. The method as claimed in claim 1 wherein the polymer is a combination of a
- 10 hyperbranched polyamino polymer and a dendritic polymer.

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- 6. The method as claimed in claim 1 wherein the polymer is a siliconized hyperbranched polyamino polymer.
- 7. The method as claimed in claim 1 wherein the polymer is a siliconized dendritic polymer.
- 15 8. The method as claimed in claim 1 wherein the polymer is a combination of a siliconized hyperbranched polyamino polymer and a siliconized dendritic polymer.
  - 9. The method as claimed in claim 1 wherein the polymer is a combination of a hyperbranched polyamino polymer and a dendritic polymer and wherein one of the polymers is siliconized.
- 20 10. A method as claimed in claim 1 wherein the polymer has a molecular weight of at least 5000 Daltons
  - 11. A method as claimed in claim 1 wherein the polymer is associated with a solid particle.
- 12. A method as claimed in claim 11 wherein the association is the immobilization of the polymer on the surface of the solid particle.
  - 13. A method as claimed in claim 11 wherein the association is the solid particle embedded in the polymer.
  - 14. A method as claimed in claim 11 wherein the solid particle is silica.
  - 15. A method as claimed in claim 14 wherein the silica is fumed.
- 30 16. A method as claimed in claim 14 wherein the silica is precipitated.
  - 17. A method as claimed in claim 14 wherein the silica is a silica gel.

- 18. A method as claimed in claim 14 wherein the silica is dispersed.
- 19. A method as claimed in claim 11 wherein the solid particle is diatomaceous earth.
- 20. A method as claimed in claim 11 wherein the solid particle is sand.
- 21. A method as claimed in claim 11 wherein the solid particle is cellulose.
- 5 22. A method as claimed in claim 11 wherein the solid particle is polystyrene.
  - 23. A method as claimed in claim 11 wherein the solid particle is clay.
  - 24. A method as claimed in claim 11 wherein the solid particle is porous.
  - 25. A method as claimed in claim 11 wherein the solid particle is nonporous.
  - 26. A method as claimed in claim 11 wherein the solid particle is hydrophobic.
- 10 27. A method as claimed in claim 11 wherein the solid particle is hydrophilic.
  - 28. A method as claimed in claim 11 wherein the solid particle is a nano particle.
  - 29. A method as claimed in claim 11 wherein the solid particle is a macro particle.
  - 30. A method as claimed in claim 11 wherein the solid particle is a micro particle.
  - 31. In combination, a mixture of a fluid and a polymer capable of interacting with charged molecules in the fluid.
    - 32. In combination, a mixture of a fluid and a polymer capable of interacting with charged molecules in the fluid wherein the polymer is associated with a solid particle.

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